

1. (Currently Amended) A power generation plant ~~having comprising:~~
~~_____ at least one gas turbine cycle with including a~~ heat-recovery boiler (4) ~~and at least one~~
~~steam turbine cycle operated via in communication with the~~ heat-recovery boiler (4), the gas
turbine cycle being ~~designed to be~~ semi-closed and ~~essentially substantially~~ free of emissions,
~~and essentially the gas turbine cycle comprising a compressor (1), a combustion chamber (2)~~
~~arranged downstream of the compressor (1), a gas turbine (3) arranged downstream of the~~
~~combustion chamber (2), a heat-recovery boiler (4) arranged downstream of the gas turbine (3), a~~
~~hot-gas path between the gas turbine and the heat-recovery boiler, an exhaust-gas path~~
~~downstream of the heat-recovery boiler, and at least one generator (8) coupled to the gas turbine~~
~~(3), characterized in that:~~

~~_____ first means (12) are arranged which for alternatively or additionally allow allowing~~ hot
gas to be fed into ~~the said hot-gas path (23) between gas turbine (3) and heat-recovery boiler (4),~~
~~and in that; and~~

~~_____ second means (15) are arranged which for alternatively or additionally allow allowing~~
exhaust gas to be expelled from the exhaust-gas path (40) ~~downstream of the heat-recovery~~
~~boiler (4).~~

2. (Currently Amended) The power generation plant as claimed in claim 1,
~~characterized in that wherein the first means and the second means (12, 15) are each comprise~~
~~switch-over members which allow the feeding-in or expelling in particular by resetting air flaps~~
~~gas.~~

3. (Currently Amended) The power generation plant as claimed in ~~either of the~~
~~preceding claims claim 1, characterized in that further comprising:~~
~~_____ at least one auxiliary burner configured and arranged to supply the additional-hot gas; to~~
~~be alternatively or additionally fed into the hot-gas path (23), is provided by one or more~~
~~auxiliary burners (13) which are preferably supplied with fresh air (34) via a blower (14).~~

4. (Currently Amended) The power generation plant as claimed in ~~one of the preceding claims~~claim 1, ~~characterized in that wherein the gas turbine cycle comprises a CO₂/H₂O gas turbine cycle is involved in which capable of producing CO₂ and H₂O produced, via corresponding, and further comprising:~~

~~_____ means for removing CO₂ and H₂O including means for compression, (6) and/or means for cooling (7), or both are removed from the gas turbine cycle, in particular preferably in such a way as to branch off directly downstream of the compressor (1), and in particular in a liquid and/or supercritical form; and in that~~

~~_____ means for supplying the gas turbine cycle is supplied with largely substantially pure oxygen in particular via an air separation plant (9).~~

5. (Currently Amended) The power generation plant as claimed in ~~claim 4~~claim 20, ~~characterized in that wherein the air separation plant (9) is comprises a cryogenic plant or a diaphragm-based process plant based on a diaphragm process.~~

6. (Currently Amended) The power generation plant as claimed in ~~one of the preceding claims~~claim 1, ~~characterized in that wherein said compressor, said combustion chamber, and said gas turbine together comprise a gas turbine plant;~~

~~_____ wherein the steam turbine cycle is of essentially substantially closed design and has includes at least one steam turbine (10, 19) and at least one generator (11) coupled thereto, to the at least one steam turbine; and in that~~

~~_____ wherein the steam turbine cycle, with the use when solely of hot gas is fed in via the first means, while and when gas is simultaneously expelled via the second means, can is configured and arranged to be operated in such a way so that the at least one generator (11) of the steam turbine cycle generates sufficient energy in order to;~~

~~_____ put the said gas turbine plant (1-3) and an optional air separation plant (9) possibly present into operation, or respectively in order to serve~~

~~_____ operate as an emergency generating unit in the event of a failure of the said gas~~

turbine plant-(1-3).

7. (Currently Amended) The power generation plant as claimed in claim 6, characterized in that, for starting up the gas turbine, a further comprising:
_____ a switch-over member-(17), via which ambient air (39) can be drawn in, is arranged upstream of the compressor-(1).

8. (Currently Amended) The power generation plant as claimed in ~~one of the preceding claims~~claim 1, characterized in that the steam turbine arranged in wherein the steam turbine cycle is comprises a bottoming steam turbine-(10).

9. (Currently Amended) The power generation plant as claimed in ~~one of the preceding claims~~claim 1, characterized in that wherein the steam turbine cycle comprises a topping steam turbine (19), ~~that produces~~ that produces partly expanded exhaust steam; ~~and of which, after injection~~

_____ wherein the steam turbine cycle is configured and arranged to inject said partly expanded exhaust steam into the gas turbine cycle medium upstream of, in, ~~and/or~~ downstream of, or combinations thereof, the combustion chamber-(2), ~~is expanded and thereafter expand~~ partly expanded exhaust steam to ambient pressure in the gas turbine-(3), ~~with to deliver power being delivered, in particular a switch-over member (18) being provided with which the exhaust steam can be directed past the gas turbine directly for liquefaction into a cooler (5) arranged in the gas turbine cycle.~~

10. (Currently Amended) A method of starting up a power generation plant as claimed in ~~one of claims~~claim 1 to 9, characterized in that, ~~first of all, the method comprising~~:
_____ in a first phase, putting into operation the steam turbine cycle ~~is put into operation with~~ hot gas fed in via the first means-(12), while ~~at the same time simultaneously~~ the exhaust gases are at least partly expelled via the second means-(15), ~~then,;~~

_____ in a second phase, motor-driving the at least one generator (8) of the gas turbine cycle is ~~motor-driven with current by from a generator (11) arranged in the steam turbine cycle in order to start up the a turboset (1, 3), comprising the compressor, the combustion chamber, and the gas turbine;~~

_____ drawing in fresh air or a combustion-gas mixture with the compressor (1), via an air flap (17) arranged upstream, and/or via the second means (15) opened in both directions, drawing in ~~fresh air or a combustion-gas mixture or both;~~ and

_____ delivering it the fresh air or a combustion-gas mixture through the combustion chamber (2), in which, ~~possibly with additional feeding of largely pure oxygen,~~ fuel is fired, so that the turbine (3) starts to assist the at least one motor-driven generator (8) and finally serves as sole drive;

_____ wherein the hot exhaust gases of the gas turbine (3) progressively taking take over the steam generation in the heat-recovery boiler, (4) and until said hot exhaust gas completely taking takes over the steam generation in the heat-recovery boiler (4) at the end.

11. (Currently Amended) A method of starting up a power generation plant as claimed in one of claims claim 1 to 9, characterized in that, first of all, the method comprising:

_____ in a first phase, putting into operation the steam turbine cycle is put into operation with hot gas fed in via the first means (12), while at the same time simultaneously the exhaust gases are at least partly expelled via the second means (15), in that;

_____ after the a turboset (1-3, 8) comprising the compressor, the combustion chamber, the gas turbine, and the at least one generator, is running in a self-sustaining manner, operated with air as a substitute medium via an air flap (17) arranged upstream of the compressor (1), is running in a self-sustaining manner, in a second phase, closing the gas turbine cycle is closed via the first means and the second means (12, 15) and the air flap (17), and largely;

_____ feeding substantially pure oxygen is fed as an oxidizing agent to the combustion chamber (3);

_____ expelling gas being continuously expelled from the gas turbine cycle in order to

compensate for the feed of oxygen and fuel, ~~and;~~

wherein the composition of the circulating gas progressively ~~approaching~~ approaches an equilibrium, ~~in which;~~ and

when said equilibrium is reached, starting the separation and liquefaction of the combustion products ~~can be started.~~

12. (Currently Amended) The method as claimed in claim 11, ~~characterized in that~~
wherein the gas turbine cycle is a CO₂/H₂O gas turbine cycle, and in that further comprising:
starting the separation and liquefaction of excess carbon dioxide ~~can be started by~~
compressing the carbon dioxide, in a compressor (6), being brought to the a pressure required for
further use; and ~~being further dried~~
drying and ~~liquefied~~ liquefying the excess carbon dioxide in a cooler (7).

13. (Currently Amended) The method as claimed in ~~one of claims claim~~ 10 to 12,
~~characterized in that~~ further comprising:
at least partly using the current available after the first phase ~~via from~~ the steam turbine
cycle generator (11) ~~is at least partly used for operating the an~~ air separation plant, (9) and thus
for providing ~~largely~~ substantially pure oxygen for the combustion process in the combustion
chamber (2).

14. (Currently Amended) The method as claimed in ~~one of claims claim~~ 10 to 13,
~~characterized in that,~~ further comprising:
during or after the first phase, making available a large proportion of the start-up output is
~~made available~~ in the form of heat by ~~means of the~~ auxiliary burners (13).

15. (Currently Amended) A method of operating a power generation plant as claimed
in ~~one of claims claim~~ 1 to 9, ~~characterized in that,~~ the method comprising:
when the gas turbine cycle is not operating, operating only the steam turbine cycle is

~~operated via the~~ by feeding-in of hot air with the first means (12) and ~~via the~~ by expelling of exhaust gases with the second means (15); and ~~in that~~
providing current with the steam turbine cycle generator (11) arranged in the steam turbine cycle thus provides current in particular in the sense of an emergency generating unit.

16. (New) The power generation plant as claimed in claim 2, wherein the switch-over members comprise resetting air flaps.

17. (New) The power generation plant as claimed in claim 3, further comprising:
a blower configured and arranged to supply said at least one auxiliary burner with fresh air.

18. (New) The power generation plant as claimed in claim 4, wherein the means for removing branches off directly downstream of the compressor.

19. (New) The power generation plant as claimed in claim 18, wherein the means for removing comprises means for removing the CO₂ and H₂O in a liquid form, a supercritical form, or both.

20. (New) The power generation plant as claimed in claim 4, wherein the means for supplying substantially pure oxygen comprises an air separation plant.

21. (New) The power generation plant as claimed in claim 9, wherein the gas turbine cycle further comprises a cooler, and wherein the steam turbine cycle comprises a switch-over member configured and arranged to direct the partly expanded exhaust steam past the gas turbine into the cooler directly for liquefaction.

22. (New) The method as claimed in claim 10, wherein delivering further comprises

feeding additional, substantially pure oxygen.

23. (New) The method as claimed in claim 11, further comprising:
at least partly using the current available after the first phase from the steam turbine cycle generator for operating an air separation plant, for providing substantially pure oxygen for the combustion process in the combustion chamber.
24. (New) The method as claimed in claim 11, further comprising:
during or after the first phase, making available a large proportion of the start-up output in the form of heat by auxiliary burners.
25. (New) The method as claimed in claim 15, wherein providing current comprises providing as an emergency generating unit.